



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/573,215

09/19/2006

Christian Birkner

22307-US

6868

22829 7590 03/18/2008

Roche Molecular Systems, Inc.
Patent Law Department
4300 Hacienda Drive
Pleasanton, CA 94588

EXAMINER

CHUNDURU, SURYAPRABHA

ART UNIT

PAPER NUMBER

1637

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,215	Applicant(s) BIRKNER ET AL.	
	Examiner Suryaprabha Chunduru	Art Unit 1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' response to the office action filed on January 04, 2008 has been considered and acknowledged.

Status of the application

2. Claims 1-8 are pending. Claims 9-14 were canceled. All the arguments and amendment were fully considered and found persuasive for the reasons that follow. The instant amendment recites new limitation 'consisting of' which was not present in the previously examined claims and therefore the new rejections are applied to the amended claims. The action is made FINAL necessitated by Amendment.

New Grounds of Rejections necessitated by Amendment

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The instant amended claim 1 recites 'a solution consisting of guanidinium and sulfite ions.' The meets and bounds of the claim are unclear and indefinite because 'consisting of' is a closed language and excludes other elements, thus it is unclear, how a solution consisting of guanidinium and sulfite ions in it without a solvent, that is, does it excludes a solvent such as water or buffer, or does it refer to a dehydrated reagent. Thus the claim reciting said limitation consisting of excludes the solvent and recitation of 'a solution consisting of' makes the claim indefinite.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Zon et al. (US Pub No.2005/0095623 A1).

Zon et al. teach a method of claim 1, for the conversion of a cytosine base in a nucleic acid to a uracil base comprising

(a) providing a solution that contains a nucleic acid (see at least page 1, paragraph 0007-0008, page 2, paragraph 0014);

(b) providing guanidinium hydrogen sulfite (bisulfite (=hydrogen sulfite) + guanidine compound) and preparing a solution consisting of guanidinium and sulfite ions (sodium bisulfite and polyamine compound) (see at least page 1, paragraph 0008, 0011, page 2, col. 1, line 1-3, paragraph 0018, 0024, 0027);

(c) mixing the solutions from step (a) and (b) (see at least page 1, paragraph 0007-0008);

(d) incubating the solution obtained in step (c) containing the nucleic acid and guanidinium and sulfite ions whereby the nucleic acid is deaminated (see at least page 3, paragraph 0038);

(e) incubating the deaminated nucleic acid under alkaline conditions whereby the deaminated nucleic acid is desulfonated (see at least page 2, paragraph 0014, page 3, paragraph 0038);

(f) isolating the deaminated nucleic acid (see at least page 3, paragraph 0038).

With regard to claim 2, Zon et al. teach that the concentration of guanidinium ions and sulfite ions is between 0.1 and 8M (see at least page 1, paragraph 0012).

With regard to claim 3, Zon et al. teach that the pH of solutions in step (b) and step (c) is less than 7.0 (see at least page 4, paragraph 0044, and 0047, table 1).

With regard to claims 4-5, 7-8, Zon et al teach the incubation temperature is between 0⁰ C and 90⁰ C (see at least page 1-2, paragraph 0013).

With regard to claim 6, Zon et al. teach that the step (e) is performed by adding an alkaline solution (see at least page 2, paragraph 0014). Accordingly Zon et al. anticipates the instant claims.

Response to arguments:

5. With regard to the informalities to the claims 1-2, 4-5, and 7-8, Applicants' arguments and the amendment were fully considered and the objection to the informalities is withdrawn herein.

6. With regard to the rejection of claims 4-5, 7-8 under 35 USC 112, second paragraph, Applicants' arguments and the amendment were fully considered and the rejection is withdrawn herein in view of the amendment.

7. With regard to the rejection of claims 1-8 under 35 USC 102(e) as being anticipated by Zon, Applicants' arguments and the amendment were fully considered and the rejection is withdrawn herein in view of the amendment.

Conclusion

No claims are allowable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M, Mon - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Suryaprabha Chunduru/

Primary Examiner, Art Unit 1637